

DATA USEABILITY WORKSHEET

The Dean Company
Medium: Groundwater

Activity	Comment
Field Sampling	
Discuss sampling problems and field conditions that affect data useability.	Groundwater samples were collected from 12 monitoring wells located onsite. There were no apparent problems reported from the field collection program that could affect data useability.
Are samples representative of receptor exposure for this medium (e.g. sample depth, grab vs composite, filtered vs unfiltered, low flow, etc.)?	Groundwater samples submitted for organic and inorganic analyses were non-filtered samples collected using low flow purging and sampling techniques. These samples are representative of receptor exposure.
Assess the effect of field QC results on data useability.	A few of the metals in the samples were qualified "B" due to the presence of the metals in blank samples.
Summarize the effect of field sampling issues on the risk assessment, if applicable.	There are no field sampling issues that should affect the risk assessment.
Analytical Techniques	
Were the analytical methods appropriate for quantitative risk assessment?	Yes. Groundwater samples were analyzed for organic compounds according to Contract Laboratory Program (CLP) Statement of Work (SOW) for Organic Analysis, Multi-Media, Multi-Concentration, OLM04.2. Inorganic groundwater samples were analyzed according to CLP SOW for Inorganic Analysis, Multi-Media, Multi-Concentration, ILM04.1.
Were detection limits adequate?	Yes. The method detection and quantitation limit were less than the associated risk-based concentration (RBC) values, except for chloroform and thallium. For these two compounds, no available methods can achieve the RBC as a quantitation limit. For all non-detected chemicals in groundwater, the method detection and quantitation limits were less than the associated RBC values. Recommend no changes to the data set.
Summarize the effect of analytical technique issues on the risk assessment, if applicable.	There are no analytical technique issues that should affect the risk assessment.

DATA USEABILITY WORKSHEET (cont.)

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Activity	Comment
Data Quality Objectives	
Precision - How were duplicates handled?	Relative percent differences (RPDs) were calculated for one pair of duplicate samples. The RPDs were less than the EPA-approved RPD of 20%. The highest concentration of a compound detected in the samples was used in the risk assessment.
Accuracy - How were split samples handled?	Split samples were not collected.
Representativeness - Indicate any problems associated with data representativeness (e.g., trip blank or rinsate blank contamination, chain of custody problems, etc.).	Analytes qualified with a "B" due to blank contamination will be considered as non-detects during the risk assessment.
Completeness - Indicate any problems associated with data completeness (e.g., incorrect sample analysis, incomplete sample records, problems with field procedures, etc.).	No problems were associated with data completeness.
Comparability - Indicate any problems associated with data comparability.	No problems have been associated with data comparability.
Were the DQOs specified in the QAPP satisfied?	Yes, the DQOs identified in the Sampling and Analysis Plan were satisfied.
Summarize the effect of DQO issues on the risk assessment, if applicable.	There are no DQO issues that should affect the risk assessment.

DATA USEABILITY WORKSHEET (cont.)

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Activity	Comment
Data Validation and Interpretation	
What are the data validation requirements?	For organic samples, validators were required to check the following items: holding times, instrument performance checks, initial and continuing calibrations, blanks, system monitoring compounds, matrix spike/matrix spike duplicates, regional QA/QC, internal standards, target compound identification, contract required quantitation limits, tentatively identified compounds, system performance, and overall assessment of data. For inorganic samples, validators were required to check holding times, calibration, blanks, interference checks, laboratory control samples, duplicate samples, matrix spike samples, furnace atomic absorption QC, ICP Serial Dilution, sample result verification, field duplicates, and perform an overall assessment of the data.
What method or guidance was used to validate the data?	Region III modifications to "Laboratory Data Validation Functional Guidelines for Validating Organic (and Inorganic) Analyses", USEPA 9/94 (and 4/93).
Was the data validation method consistent with guidance? Discuss any discrepancies.	Yes. The data validation method was consistent with regional guidance.
Were all data qualifiers defined? Discuss those which were not.	Yes. All data qualifiers were defined.
Which qualifiers represent useable data?	B, J, L, U, UJ, and UL
Which qualifiers represent unuseable data?	R
How are tentatively identified compounds handled?	Only TICs that were determined not to be laboratory or field artifacts were reported. All TICs were reported with an "N" and/or a "J" qualifier. "N" qualified data indicates that the analyte is tentatively identified. "J" qualified data indicates that the analyte is present but reported value is estimated. TICs will be evaluated qualitatively in the risk assessment.

DATA USEABILITY WORKSHEET (cont.)

The Dean Company

Medium: Groundwater

Activity	Comment
Summarize the effect of data validation and interpretation issues on the risk assessment, if applicable.	Unusable data qualified with an “R” will not be used in the risk assessment. All other data, both qualified and unqualified, will be used in the risk assessment.
Additional notes:	None.